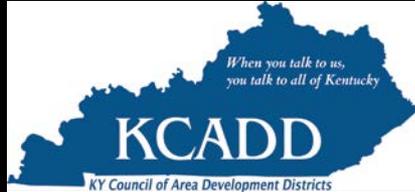


Case History - City of Winchester

David Wrightsman



Introduction

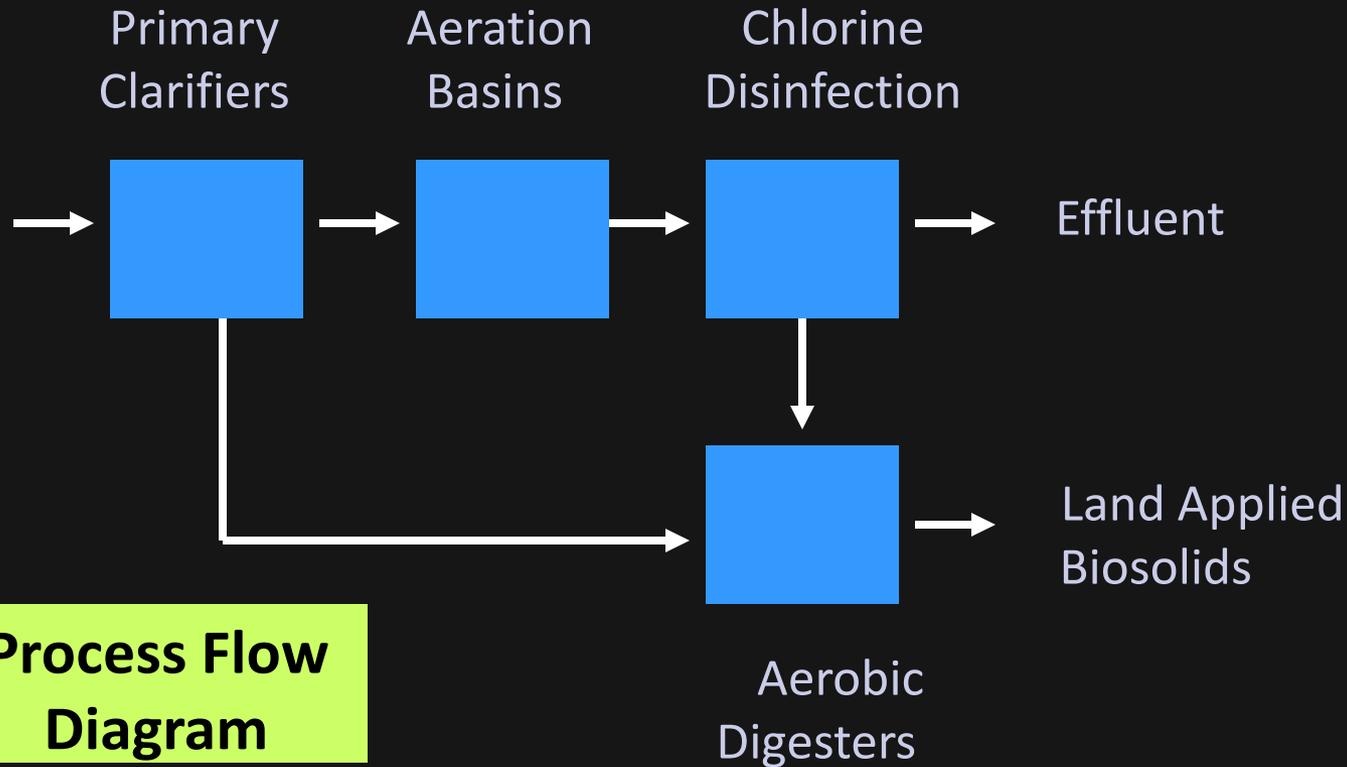
Overview

- City of 5,000 population
- 2 Mgd wastewater facility
- Had never done a PC project
- Customer was experiencing blower failures and had no backup
- RFP in March 2005
- Construction
 - Start July 2005
 - Complete Jan 2006



Wastewater Facility

Conventional activated sludge



Procurement

- Concept Introduction September 2004
- Feasibility December 2004
- Request for Proposals January 2005
 - One response
- Negotiation and scope verification March 2005
- Board of Works Approval May 2005
- Contract Authorized June 2005



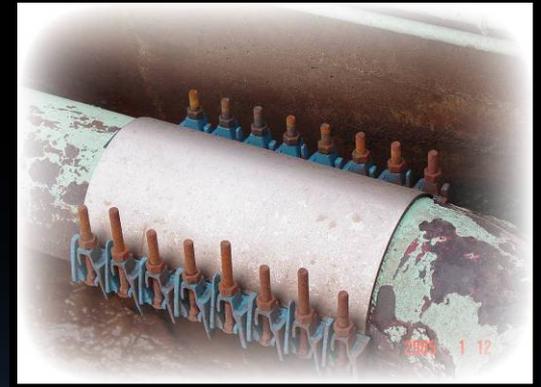
Project Team



Scope of Work

Aeration

- Convert from coarse bubble to fine bubble aeration in 4 basins



Scope of Work

Blower

- Replace existing 150 hp positive displacement with 75 hp variable speed, PD blowers
- Reduced load allowed for smaller blowers



Scope of Work

Aeration

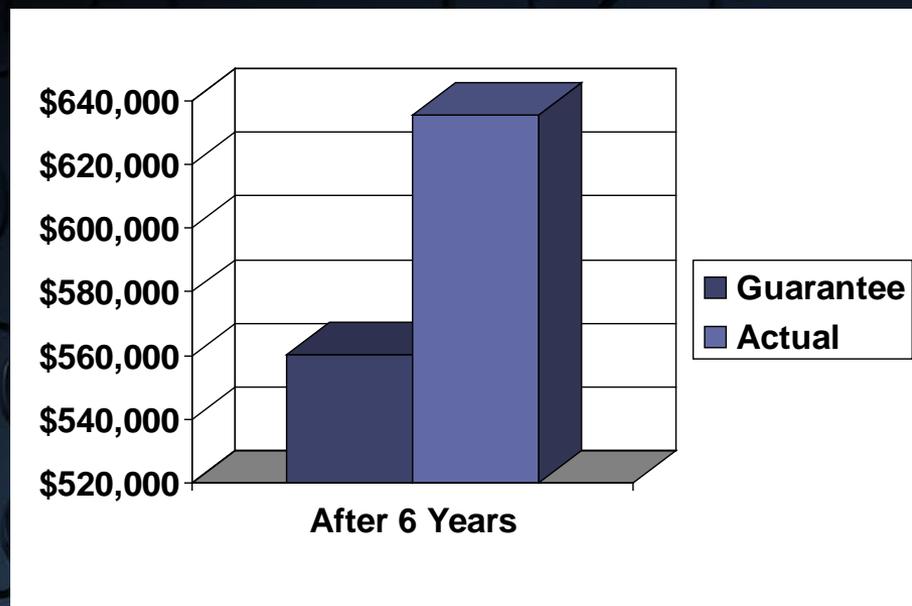
- Floating dissolved oxygen sensors along with new valves along the air pipe header allowed for active DO control.
- Pre-project levels were between 5 to 8 ppm
- After project was near steady 2 ppm



Financials

- Contract Price \$795,472
- Financed 10 years at 4.40% Interest
- 7.1 year simple payback
- Savings thru year 5
 - Guarantee = \$ 560,192
 - Actual = \$ 635,746

Excess savings allowed for additional reinvestment into collection system improvements



Why Do it?

- External funding accelerated project
- No change order from GMAX price
- Partnered with incumbent engineering firm
- No rate increases required



Do Different?

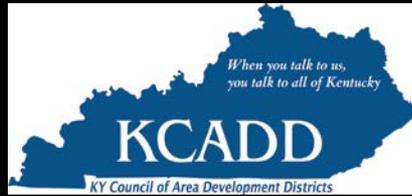
Issue

- Several items were not addressed due to fiscal limits

Next Time

- Phase 2 in development





Thank You
Questions?

